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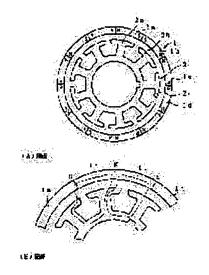
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## (54) MOTOR USING PERMANENT MAGNET

## (57)Abstract:

PURPOSE: To alleviate necessity of a yoke and to simplify a structure by alternately inverting the polarities of poles of a plurality of permanent magnets, arranging them in series, and employing the magnets as magnetic path forming parts.

CONSTITUTION: A plurality of permanent magnets 1a-1d are disposed in series, and the polarities of the adjacent magnets are inverted and arranged. That is, N-pole of the magnet 1a and N-pole of the adjacent magnet 1b are opposed to form a composite N-pole, and similarly S-pole of the magnet 1b and S-pole of the magnet 1c are opposed to form a composite S-pole. Similarly, the opposed parts of the magnets 1e, 1d form an N-pole, and thus N-pole, S-pole, N-pole,..., are alternately formed. If armature coils 15 are disposed oppositely to the plurality of the poles formed in this manner, an effective magnetic circuit can be formed, and a magnetic flux is not almost generated at the opposite side of an armature, and hence it is respective.



almost generated at the opposite side of an armature, and hence it is not always necessary to provide a yoke at the opposite side of the armature.

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